DATA STANDARD FOR REPRESENTATION OF ADDRESS INFORMATION

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DATA STANDARD FOR REPRESENTATION OF ADDRESS INFORMATION

1.   <u>PURPOSE</u>. This data standard establishes the format for representation of address information to be maintained in all EPA data collections containing information about establishments regulated by EPA, under authority of federal environmental legislation, or non-regulated establishments and organizations of interest to the Agency. Standardization of the format and content of address data elements will enhance data integration capabilities and increase the utility of EPA data relating to establishments and organizations of interest.

2.   <u>SCOPE AND APPLICABILITY</u>. The requirements of this data standard apply to all programs responsible for maintaining data relating to establishments and organizations reported to EPA and stored in automated or manual information collections developed for programmatic, research, or administrative purposes.

a.   The standard applies to Agency programs that operate existing information management systems, and those that are developing future Agency systems in support of federal environmental regulations and other programs of concern to the Agency. The principles of the standard also apply to all establishments of interest to EPA, including regulated and non-regulated facilities, establishments that are not facilities (e.g., hazardous waste sites and monitoring stations), and organizations (e.g., corporations responsible for pesticide registrations).

b.   This standard is applicable to addresses for business contact (i.e., mailing address) and those intended to locate a specific property of EPA interest (i.e., the geographic address).

c.   The standard is also applicable to names of natural persons (i.e., points of contact) and legal persons (i.e., organizations) that are used in conjunction with mailing addresses and electronic mail addresses.

d.   Geographic address, for the purposes of this standard, includes places that have urban-style addresses (e.g., places that can be located by street names and building numbers), as well as places that are located by rural routes and highway contract numbers. Geographic addresses perform a descriptive role that enables one to physically determine the location of the facility or other establishment of interest. It is important to the Agency that some form of geographic (i.e., real property) address is available to physically locate places of environmental concern. Geographic addresses also provide a classification role that enables development of demographics based on one or more components of address (e.g., identifying all permitted air emissions within a county or a ZIP Code).

e.   The use of data that provide directional information (e.g., 5 miles North of US 1 on SR 234), and the use of spatial coordinates (e.g., latitude, longitude, and altitude; or range, township, and section) are not included in this address data standard.

f.   Mailing addresses (i.e., business addresses) are applicable to all establishments of interest to the Agency. Mailing addresses can include contact names, post office boxes, rural delivery routes, and mail stops, in addition to urban-style street addresses. Mailing addresses facilitate communication by allowing information to pass between the Agency and reporting parties. Any form of mail is included in this role, including product shipments.

g.   This standard applies to both domestic and international address information, as well as to military mailing addresses.

h.   This standard does not apply to address blocks (i.e., placement of address on an envelope) nor to return addresses on items prepared for mailing. Format for mailing address is discussed in this standard only as it affects the storage and display of information to be used in preparing an item for mail delivery. Guidelines for addressing a mailpiece are available through USPS publications, referenced in this document's Section 5, Authorities.

i.   A waiver may be granted by the Chief Information Officer (CIO) for legacy applications that achieve compliance by means other than the use of this standard (see "Provision for Waiver" in Section 9).

3.   REFERENCE. Chapter 5 of the EPA IRM Policy Manual sets forth the general principles on data standards within the Agency. This address standard is one of several data standards for use by EPA in implementing the policy. This data standard references an initiative established by the IRM Executive Steering Committee to determine key identification data elements that uniquely identify facilities and other places of interest to the Agency.

4.   BACKGROUND.

a.   Order 2180.3 of Chapter 5 of the EPA IRM Policy Manual is a facility identification data standard that provides for a consistent, Agency-wide coding scheme for facility identification. The standard specifies that key information about the facility, including facility name and address information, must be made available for assignment of a facility identifier. The standard, however, does not itemize the specific data elements to be made available, nor does it standardize the format for those data elements.

b.   There now exists an urgent need to "reinvent government," including a reinvention of reporting requirements that will reduce the reporting burden on the regulated community, improve access for the general public, and improve the capabilities of the Agency to integrate

data from environmental programs through key identification data elements that identify facilities regulated by the EPA.

c. Environmental legislation and regulations often include specific definitions for the meaning of the term "facility" for EPA programs. The resulting differences in collection of facility data make it difficult to compare and integrate information about facilities and other establishments and organizations of interest to the Agency.

d. EPA has adopted other data standards for representation of data of common interest to EPA programs. Adoption of a standard for representation of address will help the Agency realize the potential benefits of data standards for information integration and analysis. Accurate, consistent physical addresses for places of environmental concern will also facilitate community-based risk analyses across multimedia.

5. <u>AUTHORITIES</u>.

a. ISO 11180:1993 *Standard for Postal Addressing*, dated November 20, 1991, provides general definitions and rules for mailing address structure, applicable to domestic and international mailings.

b. USPS Publication 28, *Postal Addressing Standards*, dated January 1992, was used as the reference for defining business-to-business data elements, two-character abbreviations for Canadian provinces, and other general requirements. Additional USPS publications (Pub) relevant to this standard include: Pub 221, *Addressing for Success*; Pub 25, *Designing Business Letter Mail*; Pub 63, *Designing Flat Mail*; and Pub 353, *Designing Reply Mail*.

c. The USPS *Domestic Mail Manual (DMM)*, Issue 49, dated September 1, 1995, provided the definitions and elements of a complete delivery address, in addition to other information about preparing mail for domestic delivery. The USPS *International Mail Manual* provides similar information about preparing mail for delivery to foreign countries.

d. The USPS *National Customer Support Center* on Internet (http://www.usps.gov/ncsc/) provided much of the information included in this standard, particularly for lookup capabilities for ZIP Code and ZIP+4, official abbreviations for states and possessions, street suffixes, secondary unit designators, publications available from the USPS, and identification of data files that might be used to validate EPA systems' address data.

e. *Fourth Generation Data, A Guide to Data Analysis for New and Old Systems*, Dan Tasker, Prentice Hall, 1988, Chapter 10, Fourth Generation Data Types, describes person-name groupings and address groupings of data elements.

f.   *Standard Reference Tables (SRT), Summary Report*, SDC-0055-057-LF-5028A, May 2, 1996, provides information about the standard domains that exist for EPA geopolitical data (e.g., country, state, or province, and county or county equivalent). Federal Information Processing Standard Publications (FIPS PUB) were used as the source of standard data domains where appropriate. SRT are available to all EPA information system managers and system developers. They can be accessed through direct or network connections to the IBM mainframe at the National Computer Center, Research Triangle Park, North Carolina. The SRT are implemented as both ORACLE and DB2 tables. The tables can be downloaded to other platforms as database tables or as flat files for implementation in other software environments. The Points of Contact (POC) for obtaining more information about using SRT are Larry Fitzwater or Jerry Widdowson, both at the Enterprise Information Management Division (EIMD) mail code, 3408. Both of the POC can also be contacted through EPA   E-mail.

g.   *HUD Address Quality Standards*, Central Information Management, U.S. Department of Housing and Urban Development, draft dated March 27, 1996, provides guidance about address standards used by other federal government organizations, including requirements for address matching that can be used as input to geographic information systems (GIS) that assign spatial coordinates for places of interest to EPA.

6.   <u>STANDARD</u>.

a.   The data elements that are required to uniquely identify the physical location of an establishment and the mailing address to be used for communication with the establishment are identified by this standard. The standard also addresses the format for representation of names, including person names and organization names. Definitions relevant to this standard are presented in Appendix A. Information about geographic address is provided in Appendix B, mailing addresses and names in Appendix C, addresses for electronic communications in Appendix D, standard abbreviations in Appendix E, and data files available from the USPS for data validation in Appendix F.

b.   Abbreviations are acceptable for certain address data elements. Domains of valid data, including abbreviations and names, are available for geopolitical units (i.e., country, state, county, and tribal lands) as SRT. Data values used for geopolitical units in address elements shall comply with these domains.

c.   Domains for address elements that are not currently available as SRT, both abbreviations and names that are contained in the USPS Postal Publication 28, are provided in Appendix E. These address elements are targeted for Agency-wide use, and they are expected to be implemented as SRT.

d. Geopolitical data elements must be validated in context (e.g., states and provinces must be valid within a country). U.S. Postal Service (USPS) maintains data files that can be used to validate U.S. mailing and geographic addresses in context. More than one USPS data file is necessary to provide comprehensive data integrity. USPS data files that are recommended for validation and for obtaining missing data values (e.g., ZIP+4 and county identification) are described in Appendix F.

e. The formats for natural person names and legal person names shall conform to the standard formats described in Appendix C.

f. Information about military mailing addresses is also included in Appendix C.

7. RESPONSIBILITIES.

a. The Office of Information Resources Management (OIRM) shall:

(1) Lead the efforts to develop, implement, and ensure adherence to this data standard.

(2) Lead the efforts to develop a management plan describing steps for implementation of the standard.

(3) Provide guidance and technical assistance in meeting the requirements of this standard.

(4) Oversee resolution of conflicts regarding applicability or other issues relating to the standard.

b. New systems (i.e., those developed after acceptance of this standard) shall be developed in compliance with this standard.

c. Existing systems will have 3 years from the date of approval of this standard to be in compliance. In no case will the period for compliance extend beyond September 30, 1999.

8. DEFINITIONS. Definitions applicable for this EPA address data standard are provided in Appendix A of this document.

9. PROVISION FOR WAIVER. In general, OIRM will attempt to work with program offices to develop a feasible implementation schedule for the standard. Cases may exist, however, in which exceptions to the requirements of this standard are warranted. In these cases, program offices shall demonstrate reasons for a waiver. The process to apply for a waiver is as follows:

a.   Draft an application for waiver to the CIO outlining the reasons why the address data standard should not be implemented in the information collection.

b.   Obtain approval by the decision official in the requesting office and the respective Senior Information Resources Management Official (SIRMO).

c.   Submit the application to the CIO, who has responsibility for final disposition.

d.   The applying office will be notified in writing of the disposition of the waiver.

10.   <u>PROCEDURES</u>.

a.   Addressee information (i.e., person name or organization name) is not an essential part of the place-identification of an address. It is not included with the descriptions of geographic addresses.

b.   The natural person's name and title and the legal person's name and department name are often used in conjunction with mailing address. Means of electronic communication are usually associated with the natural person's name information.

c.   Address data can be stored electronically as uppercase or lowercase text. Search algorithms shall be insensitive to case.

d.   Geographic street address data can be stored as an address line or as parsed address elements. Where parsed data are needed for data manipulation, address lines shall be parsed according to the address elements provided in Appendix B for Geographic Address data. When street address data are stored as an address line, the address elements must be concatenated in the order described for parsed elements.

e.   Both geographic and mailing address data should be formatted and abbreviated as follows:

-    Omit punctuation for address storage and display, except where punctuation is necessary for understanding of the information. For example:

--   Pound sign -- A space should precede and follow the pound sign where use of a pound sign is important to the address.

Example: 2114 Niel Ave # 2

--   Hyphen -- A hyphen can be used to separate more than one consecutive numeric value.

         Example: 4356-21 Neil Ave

--   Hyphen -- A hyphen that separates text is replaced by a space.

         Example: "Mid-Island Plz" becomes "Mid Island Plz"

--   Apostrophe -- Omit an apostrophe that shows possession. Do not use a separator (i.e., space) to replace the apostrophe.

         Example: "Day's Crossing" becomes "Days Crossing"

-      For data display, a hyphen is always used to separate the ZIP Code and the 4-digit geographic segment code.

      Example: 22203-1234

-      Commas are never used to separate address elements that are concatenated into an address line.

      Example: <city> <state> <ZIP>-<+4>
                        Arlington VA 22230-1234

-      Abbreviations found in *Publication 65, National Five-Digit ZIP Code and Post Office Directory* should be used where needed to limit the number of characters in an address. These abbreviations are listed in Appendix E for domestic mailings. For international mailings, abbreviations are often specific to the country that is the place of delivery. The USPS *International Mail Manual* provides information about international mail delivery.

f.   "PO Box" is used incorrectly if used for private box numbers at a school or other private institution. "Box" is used to represent box numbers that are not Post Office box numbers.

g.   The name or code for "County" can be supplied from a reference table, based on city, state, and ZIP Code. The data element is not required as part of the standard.

APPENDIX A. DEFINITIONS

1.   PURPOSE. The purpose of Appendix A is to provide definitions of terms that are included in this address standard. General terms are provided in Section 2 of this appendix, and specific address data elements are provided in Section 3.

2.   GENERAL TERMS. Definitions of general terms are listed in this section in alphabetical order.

a.   Addressee Name: The natural persons name, consisting of name prefix, first name, middle initial(s) or middle name, last name, name qualifier, and educational achievements. Note that all components of addressee name are optional, with the exception of last name.

b.   Address element: An information unit considered to be indivisible, in the context of a specific type of address.

c.   Address structure: The combination of address elements of a type of address.

d.   Alternate Delivery Point: A rural route, highway contract route, or post office box where mail is delivered and an urban style street address is not available. Rural routes and highway contract routes are used in conjunction with a box number that is not a P.O. Box number. Abbreviations for alternate delivery point elements are provided in Section 2 of Appendix E.

e.   Complete mailing address: All the address elements necessary to allow an exact match with the current USPS ZIP+4 file to obtain the finest level of ZIP+4 code for the delivery address. The data elements required for a complete mailing address and the optional additional address elements are detailed in Appendix C. Complete addresses are necessary to obtain optimum rates when items are submitted to the USPS for delivery.

f.   Delivery Point: The address element(s) that define the physical street address or post office box (PO BOX) where a mailpiece is delivered.

g.   Domestic address: The address of an establishment or organization that exists within the U.S.

h.   Electronic Communications: A set of address elements used for paperless communication of information. Two forms of electronic mailing are included in this type of address: facsimile (FAX) and E-mail, distinguishable primarily by the address elements for each type. More information on the data elements and their descriptions is provided in Appendix D.

i. <u>Establishment</u>: A place-based object or spatial instance, indicating that the object of environmental concern is associated with a location. Examples of establishments of interest to EPA include facilities, businesses, military installations, manufacturing plants, hazardous waste sites, monitoring stations, and others.

j. <u>Geographic address</u>: A set of precise and complete information that describes the physical location of an establishment (e.g., a facility or other object that exists at a place that can be located). Required and optional data elements, formats, definitions, and examples for geographic address are provided in Appendix B.

k. <u>International address</u>: The address of an establishment or organization that exists in a country outside the U.S. (i.e., a foreign country).

l. <u>Legal person name</u>: A set of address elements that uniquely identify the organization that is the responsible party for an establishment of interest to the Agency. Appendix C provides the requirements for data elements, formats, definitions, and examples.

m. <u>Mailing address</u>: A set of precise and complete information, on the basis of which an item can be forwarded and delivered to the addressee without searching and without there being any doubt. Alternate terms for mailing address are *postal address* and *business address*. The requirements for data elements, formats, definitions, and examples of postal address are provided in Appendix C.

n. <u>Mailpiece</u>: A single unit of postal matter.

o. <u>Natural person name</u>: A set of address elements that uniquely identify the individual who is the point of contact when communicating with an establishment of interest to the Agency. Appendix C provides the requirements for data elements, formats, definitions, and examples for natural person name.

p. <u>Nonaddress data line</u>: Business information (e.g., account numbers, subscription order codes, presort codes, and advertising) that is not relevant to the address.

q. <u>Urban-style geographic address</u>: A geographic address that can be located by a street name and building number.

3. <u>DEFINITIONS OF ADDRESS ELEMENTS</u>. The following address elements are applicable to both geographic and mailing address. Definitions for names are also included. The elements are listed in the logical order that they might appear on a mailpiece or other address structure.

a. <u>Building name</u>: The name of a specific building that is well-known and might provide useful information for generating spatial data (e.g., latitude and longitude) and for facilitating mail delivery.

b. <u>Supplemental address information</u>: Mail stop information, number of entrance, number of floor, box number, or other information internal to the recipient is included with this address element.

c. <u>Street address</u>: A set of precise and complete data elements that cannot be subdivided and that describe the physical location of a place. Street address can be stored in a single street address field by concatenating the five following address elements in the order designated below. Where address parsing is required, parse the street address into the five address elements that follow.

    1) <u>Building number</u>: The number assigned to a building or a land parcel along the street to identify location and to ensure accurate mail delivery. This address element is also known as a *Street Number*. Numbers are assigned differently by different places. Many communities in the U.S. assign sequential numbers to land parcels, with odd numbers on one side of the street and even numbers on the other. Some places assign fractions to numbers, where more than one establishment is located on the same lot (e.g., 213 and 213½). Others may use alphabetic characters as part of the street number to distinguish between establishments (e.g., 213A and 213B).

    2) <u>Pre-directional symbol</u>: The street vector, or direction the street has taken from some arbitrary starting point (e.g., *North* Glebe Road). Standard abbreviations, listed in Appendix E, Section 1, shall be required for directional symbols.

    3) <u>Street name</u>: The name assigned to a street or road. Street names may be descriptive (e.g., Main, River), commemorative (e.g., Martin Luther King, John F. Kennedy), derived from nature (e.g., Maple or Oak), or generated by some logic (e.g., First, 2nd, etc.).

    4) <u>Street suffix</u>: The street name qualifier (e.g., Street, Avenue, Court, or Boulevard). Standard abbreviations, listed in Section 5 of Appendix E, shall be required for the street suffix. The Postal Service Standard Suffix Abbreviation (i.e., the abbreviation in column 3) shall be used. Column 1 contains the full name of the suffix, and column 2 contains other abbreviations that must be converted to the standard abbreviation in column 3.

    5) <u>Post-directional symbol</u>: The directional symbol that represents the sector of a city where a street address is located (e.g., New Hampshire Avenue, *SW*). Standard

abbreviations, listed in Appendix E, Section 1, shall be required for directional symbols.

d.   Secondary unit designator. The room, suite, apartment, unit, or building designator and number that are used by the postal service for mail delivery and for assigning the ZIP+4 postal code. The designator must conform to standard abbreviations (e.g., Bldg, Rm, Apt, etc.) as listed in Section 2 of Appendix E.

e.   City/Town/Township/Location: A finer partitioning of geographic subdivisions of a state or county, usually associated with additional levels of government. This address element also indicates the city where the delivery point is located.

f.   County (optional): The primary administrative subdivision of a state in the U.S. This optional data element can be derived from state, city, and ZIP Code. It is not required as part of this data standard.

g.   State/State Equivalent: The primary administrative subdivision of a country, usually a state or province. The data for state can be stored or displayed by UIN for the state, FIPS Code for the state, alphabetic code for the state, or the full name for the state from the SRT. Codes for the states of the U.S. and the provinces of Canada are contained in SRT. In addition, standard province codes for Canada are included in Section 3 of Appendix E.

h.   ZIP Code: The address element that identifies a geographic region or specific location defined by the postal service within the U.S. ZIP is an acronym for Zone Improvement Program.

i.   Geographic Segment Code: The 4-digit code that subdivides a ZIP Code into smaller geographic segments.   This code, following the ZIP Code and a hyphen separator, comprises the *ZIP+4* Code.

j.   International Postal Code: The postal code used for final sorting by local or regional delivery unit. Different countries have their own coding systems and formats for this code.

k.   Country: The largest of the geo-political boundaries that define address areas of the world. The country domain is available from SRT. The data for country can be stored or displayed by UIN for the country, FIPS Code for the country, or the name for the country from the SRT.

l.   PostNet Barcode: A code consisting of a group of printed and variously patterned bars, and sometimes numerals, that is designed to be scanned and read into computer memory as identificaiton for an object (i.e., a mailing address). As of July 1996, the USPS requires

PostNet barcodes on large-scale mailings in order to earn a postage discount. Vendors of postal barcode software are listed on the Internet at http://www.mecsw.com/postnet.html.

m. <u>Name Prefix</u>: The title that precedes the name of an individual, such as "Judge, Mr, Mrs, Ms, Miss, Colonel" or other military title. A set of standard values can be established, based on the types of name prefixes of interest to EPA programs.

n. <u>Last Name</u>: The surname (i.e., family name) of the individual who is the contact for a particular establishment or organization of interest to the Agency.   Last name is stored separately from the other name components for ease of sorting.

o. <u>First Name</u>: The given name or nickname for the individual who is the contact for a particular establishment or organization of interest to the Agency.

p. <u>Middle Initial(s)</u>: The first letter of the second (or more) names of an individual who is the contact for a particular establishment of organization of interest to the Agency.   Middle initials are particularly necessary to differentiate persons whose first and last names are frequently encountered (e.g., John I Smith and John K L Smith). Alternatively, the middle name can be used where space permits (e.g., Mary Ann, Billy Joe, or Jackie Joyner). The middle initial(s) or name shall be concatenated to the first name and separated by space(s) for data entry, data storage, and mailpiece address.

q. <u>Name Qualifier</u>: The qualifier that indicates that a person has the same name as another family member (e.g., Junior [Jr] or III). A set of standard values can be established, based on the types of qualifiers of interest to EPA programs.

r. <u>Educational Achievment</u>: One or more advanced degrees that may be important to an establishment (e.g., an educational institution). Examples include PhD, EdD, JD, MD, etc. A set of standard values can be established, building on the types of educational achievement information of interest to EPA programs.

s. <u>Occupational Title</u>: The generic title that identifies the natural person's occupation. Examples are *chemical engineer* and *economist*.

t. <u>Organization Title</u>: The name of the position held by the natural person within the organization of interest to the EPA.

u. <u>Organization Name</u>: Identifies the legal entity that owns, operates, or is otherwise responsible for an establishment or other organization of interest to the Agency.

v.   <u>Department of the Organization</u>: A division, group, or department name that narrows the scope of the addressee within the organization.

APPENDIX B. GEOGRAPHIC ADDRESS

1.   GEOGRAPHIC ADDRESS DATA STRUCTURE.   The address elements that make up the geographic address are listed in the following table. Note that the street address information is intended to be captured and stored in a single line, with address elements captured in the order described.

Data Element Name	Description	Format	Example	Validate
Building Name (optional)	The name of a well-known building where an establishment is located. Supplemental address information can be included.	30 char	World Trade Center City Hall Waterside Mall MS 203M	None
Urban-style Street Address:	The street where the establishment is located, including: building number, pre-directional, street name, street suffix, post-directional, and secondary unit designator.	30 char	215A N Glebe Rd SE Ste 300	Software and table lookup.
*Alternate locational address	The rural route and box number or the highway contract route and box number where the establishment is located.	30 char	RR5 Box 10 HC5 Box 45	Software and codes
City/town/ village	The city, town, or village where the establishment is located.	30 char	Arlington Falls Church	USPS table
County (optional)	The county where the establishment is located.	3 num 35 char	013 Arlington	SRT
State	The name of the primary administrative subdivision of the country where the establishment is located.	2 char 35 char	VA Virginia 51 Virginia	SRT
ZIP Code	The ZIP Code where the establishment is located.	5 num	22003	USPS table
Geographic Segment Code	The geographic segment code where the establishment is located.	4 num	2307	USPS table
International Postal Code (optional)	The postal code specific to the country where the establishment is located.	14 char	CA: BH21 2QU	None
Country (optional)	The country where the establishment is located.	2 char 35 char	US United States (default) CA Canada	SRT

2.   PROCEDURES FOR GEOGRAPHIC ADDRESS.

a.   Where parsing is required for a specific data manipulation, parsed address elements are recommended to be computer generated.

b.   To obtain ZIP+4 codes for U.S. establishments from Internet, the secondary unit designator and number, should be appended to the end of the street address line. The city, state, and ZIP+4 should also be concatenated, using spaces as separators.

c.   City, state, and ZIP+4 are parsed in this address structure for ease of data validation and to facilitate aggregation based on geopolitical address elements.

d.   PO Box information is not appropriate for entry in the street address element. This type of data should be prohibited by software protocols.

e.   Rural route and box number (RR 1 Box 3) or Highway Contract route and box number (HC 12 Box 24) can be entered in the street address element, where an urban-style street address is not available.

f.   ZIP+4 is included in the geographic address because it can be used for assigning latitude/longitude coordinates where more reliable information is not available.

g.   Building name for well-known buildings can also provide information helpful in determining locational coordinates.

APPENDIX C. <u>MAILING ADDRESS</u>

1. <u>MAILING ADDRESS DATA STRUCTURE</u>. The same data structure is appropriate for both domestic and international mailings.

Data Element Name	Description	Format	Example	Validate
Building Name* (optional)	The name of a well-known building where the postal delivery point for the establishment is located.	30 char	WORLD TRADE CENTER CITY HALL	None
Delivery Point (street address)	The mail delivery point, including the building no., pre-directional symbol, name of the street, the street type, and post-directional symbol for where the mail is delivered.	30 char	1600 N WILSON BLVD	None
Secondary Unit Designator	The room, suite, or apartment number, where the mail is delivered.	15 char	APT 6, RM 300 STE 1300	None
Alternate Delivery Point	Post office box number, rural route and box, or highway contract and box where a street address is not available or where preferred by the addressee for mail delivery.	30 char	PO BOX 234 RR5 BOX 10 HC5 BOX 45	Software check
City/Town/ Village	Name of the postal delivery office or the name of the city where the delivery point is located.	30 char	ARLINGTON FALLS CHURCH	USPS table
State	Name of the state or province where the postal delivery point is located.	2 char or 35 char	VA VIRGINIA PQ QUEBEC	SRT
ZIP Code (ZIP)	ZIP Code where the postal delivery point is located.	5 num	22003	USPS table
Geographic Segment Code	Code that subdivides the ZIP Code into smaller geographic units to facilitate mail delivery.	4 num	2307	USPS table
International Postal Code (optional)	The postal code specific to the country where the delivery point is located.	14 char	CA: BH21 2QU	None
Country	The country where the delivery point for the establishment is located.	2 char or 35 char	US UNITED STATES CA CANADA	SRT

2.   <u>NATURAL PERSONS NAME</u>. The following address elements are applicable to individuals who are points of contact and for whom data are stored and reported through EPA programs:

Data Element Name	Description	Format	Example	Validate
Last Name	The surname of the contact person. Optionally, the name qualifier and educational achievments can be included in this element.	20 char	Johnson Kersey Johnson Jr MD JD	None
First Name and Middle Initial(s) or Middle Name	The given name of a contact person, and the middle initial(s) or name. Optionally, the title can be included as a prefix in this data element.	15 char	James B Joseph J L Mary Ann Jackie Joyner Mr James A	None
*Name Prefix	The title that precedes a person's name.	5 char	Mr Major	Table lookup
*Name Qualifier	A qualifier to indicate that the name is reused in the family.	4 char	Jr III	Table lookup
*Educational Achievement	One or more advanced degrees.	10 char	PhD MD JD	Table lookup
*Occupational Title	The generic title for the occupation of the person.	30 char	Chemical Engineer Economist	None
*Organizational Title	The official title held by the contact person.	30 char	Environmental Manager	None

* Optional data elements.

3.   <u>LEGAL PERSON NAME (ORGANIZATION)</u>. The following address elements are applicable to organizations that are owners, operators, and otherwise responsible parties for which data are stored and reported through EPA programs:

Data Element Name	Description	Format	Example	Validate
Organization Name	Identifies the legal entity that owns or operates the facility.	50 char	Eastman Kodak Chemical Corp.	None
Department of the Organization	Narrows the scope of the facility or other place within the organization.	50 char	Manufacturing Division	None

4.   <u>MAILING ADDRESS FORMAT</u>. The following business address format is recommended when outputting to a mailpiece. The delivery address line and the city, state, and ZIP+4 line are required. The use of other specific address lines or address elements within a line is optional.

Address Data Element	Example
Nonaddress Data Line	********CAR-RT-SORT**CR02
PostNet Barcode	|₁₁₁||₁₁₁|||₁₁₁₁||₁₁₁₁||
Mail Stop Code	MSC4567ABCD
Addressee Name	MR JAMES J JOHNSON SR MD
Occupational Title	POLYMER CHEMIST
Organizational Title	ENVIRONMENTAL MANAGER
Department of the Organization	MANUFACTURING DIVISION
Organization Name	EASTMAN KODAK CHEMICAL CORP
Delivery Point Address	12 E BUSINESS BLVD SW STE 345
City, State, ZIP+4	NEW ROCHESTER NY 23456-0987

It is unlikely that any one business address will contain all of the business address data elements detailed above. Generally, only four or five lines are used for a mailing. For example:

Address Data Element	Example
Natural Person Name	MR JAMES J JOHNSON SR MD
Department of the Organization	MANUFACTURING DIVISION
Organizaiton Name	EASTMAN KODAK CHEMICAL CORP
Delivery Point Address	12 E BUSINESS BLVD SW STE 345
City, State, ZIP+4	NEW ROCHESTER NY 23456-0987

5.   MILITARY ADDRESS STRUCTURE. For military addresses, Army/Air Force post office (APO) and fleet post office (FPO) are the equivalent of a city name. AE, AP, and AA are the equivalents of state abbreviations assigned by geographic areas as follows:

a.   AE (ZIP Codes 090-098) designates Armed Forces in Europe, the Middle East, and Africa.

b.   AP (ZIP Codes 962-966) designates Armed Forces in the Pacific.

c.   AA (ZIP Code 340) designates Armed Forces in Central America and South America.

Examples follow:

Address Line	Example 1	Example 2
Addressee Name	MAJOR JOHN THOMAS	PC1 DAVID JONES
Department of Organization	7024 AIRPS	X-1 DIV/ADMIN
Delivery Point Address	PSC 3 BOX 2051	USS KITTY HAWK (CVA-61)
City, State, ZIP+4	APO AE 09021-2072	FPO AP 96634-2770

6. <u>INTERNATIONAL ADDRESS STRUCTURE</u>. For mail addressed to foreign countries, include the complete country name written in English, in capital letters, as the only information on the bottom line of the delivery address. Additional information is available in the USPS International Mail Manual. Examples follow.

Address Line	Example 1	Example 2
Addressee Name	MRS HELEN K SAUNDERS	MR THOMAS CLARK
Organization Name	BAKER CHEMICAL CORP	WASTE MANAGEMENT CO
Delivery Point Address	1010 CLEAR STREET	117 RUSSELL DRIVE
City, State (Province), Postal Code	OTTAWA ON K1A 0B1	LONDON WIP7HQ
Country Name (in English)	CANADA	ENGLAND

7. <u>MAILING ADDRESS PROCEDURES</u>. When preparing items for mailing, the mailing address shall be formatted according to the procedures that follow. Additional information about addressing mail is available from the USPS Domestic Mail Manual and the USPS International Mail Manual.

a. Mailing address information for street and city shall be printed with uppercase alphabetic characters.

b. Mailing address lines should be limited to 30 characters.

c. Secondary Unit Designator (e.g., suite or apartment number) is printed on the address line, at the end of the street address information, even though it is stored in a separate field. When there is insufficient space on the street address line to accommodate the supplemental address data, those data are printed on the line above the delivery point address, in lieu of a building name.

d. For mail within the U.S., the city, state, and ZIP+4 Code must appear in that order on the bottom line of the address. If all three elements cannot fit on one line, the ZIP+4 must be placed on the line immediately below the city and state, aligned with the left edge of the address block.

e. The line immediately above the bottom line is the delivery point address line for domestic mail. The street address, post office box number, rural route number and box number, or

highway contract route number and box number that identify the delivery point must appear on this line.

f.   Building names for well-known buildings (e.g., City Hall or The Empire State Building) are printed on the line preceding the delivery point address. Supplemental (i.e., internal to the recipient) addresses that are not relevant to the postal service that delivers the mail (e.g., box numbers for individuals in a college dormitory) can also be printed on this line.

g.   For foreign addresses (i.e., mailing outside the U.S.), the bottom line of the address shall include, in uppercase letters, the complete country name written in English without abbreviations. Valid country names and codes from FIPS PUB 10-4 are provided in the country SRT domain. The line above the bottom line shall include the city name and postal code or the city name, state or province name, and the postal code.

h.   When preparing mailings, addresses should be verified and corrected, using Postal Service-approved address matching software or processes, in order to obtain the lower automation rates for mailings. More favorable rates are also available when PostNet bar codes are used for large-volume mailings.

APPENDIX D. <u>ELECTRONIC MAIL ADDRESS</u>

1. <u>ELECTRONIC ADDRESS STRUCTURE</u>: There are two types of addresses for electronic communications: facsimile transfer (FAX) or E-mail. Telephone numbers are required for FAX, as well as for voice communications. The two types are described in the following paragraphs. Examples of telephone and electronic addresses follow.

Data Element Name	Description	Format	Example	Validate
Telephone Number	The telephone number where a contact person can be reached. Extension number is optional.	15 num	70390824001234 Display: 703-908-2400x1234	Numeric values
FAX Number	The telephone number where a contact person can receive a FAX.	15 num	7039082405 Display: 703-908-2405	Numeric values
E-Mail Address	The code where a person can receive electronic mail. Not validated.	30 char	Leahy.Joseph@epamail.epa.gov larry@erols.com maizie@aol.com	

2. <u>DESCRIPTION OF ELECTRONIC COMMUNICATIONS</u>.

a. Facsimile transfer (FAX) enables letters to be sent via standard phone lines. One form of fax is where a fax machine at a sending point scans, digitizes, and transmits an entire document. A machine at the receiving end reconstructs and reproduces the document from the data received. A second form of fax is where a letter is prepared electronically on a computer and communicated to another computer where the letter is printed by the receiving computer's software. In both cases, the fax is transmitted across nodes on a communications network, commonly known as the telephone.

    1) The address element for fax communications is a 10-digit telephone number. Some telephones also require a 4-digit extension number.

    2) The output edit format for a telephone number is (aaa) xxx-nnnn, where "aaa" is the area code, "xxx" the exchange number, and "nnnn" the recipient's number.

b. E-Mail is a second system of communicating electronically. E-Mail is a paperless form of communication in that the "letter" is created on a terminal or a PC as a text file. The file is

then sent to some address on the network, where it is received and stored on another file that is accessible by the intended receiver. It can be retrieved and read, again using a terminal or PC. It can also be printed, using the printing capabilities attached to the recipient's system. Formats for E-Mail address vary widely, according to the way nodes are defined on different networks.

1)   For its private network, EPA uses VAX All-In-One software. Addresses of senders and recipients are identified with a four- or five-digit number (e.g., EPA1234). It is not necessary to know the number of an E-Mail recipient when sending a message. If the recipient's number is not known, the address can be entered as "<last name>.<first initial>" or "<last name>.<first name>"

2)   The address elements for public networks (i.e., the Internet) are dependent upon the network (e.g., erols, aol, COMPUSERVE, or other) where the recipient has a "mailbox." The format for a public network E-Mail is an alphanumeric string, long enough to accommodate names, codes, slashes, at (@) signs, and other symbols.

APPENDIX E. DOMAINS FOR ADDRESS DATA VALUES

1. DIRECTIONAL SYMBOLS

DESCRIPTION	CODE
North	N
South	S
East	E
West	W
Northeast	NE
Northwest	NW
Southeast	SE
Southwest	SW

2. ALTERNATE DELIVERY POINT

DESCRIPTION	CODE
Highway contract	HC
Post Office Box	PO BOX
Rural Route	RR
Box number for other than post office box	BOX

3. CANADIAN PROVINCES

Province Name	Code
Alberta	AB
British Columbia	BC
Manitoba	MB
New Brunswick	NB
Newfoundland	NF
Northwest Territories	NT
Nova Scotia	NS
Ontario	ON
Prince Edward Island	PE
Quebec	PQ
Saskatchewan	SK
Yukon Territory	YT

4. SECONDARY UNIT DESIGNATOR

DESCRIPTION	CODE
Apartment	Apt
Basement	Bsmt **
Building	Bldg
Department	Dept
Floor	Fl
Front	Frnt **
Hanger	Hngr
Lobby	Lbby **
Lot	Lot
Lower	Lowr
Office	Ofc **
Penthouse	Ph
Pier	Pier
Rear	Rear **
Room	Rm
Side	Side **
Slip	Slip
Space	Spc
Stop	Stop
Suite	Ste
Trailer	Trlr
Unit	Unit
Upper	Uppr **

** Do not require values to follow.

5. STREET SUFFIXES

Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation
Alley	Allee	Aly
Alley	Alley	Aly
Alley	Ally	Aly
Alley	Aly	Aly
Annex	Anex	Anx
Annex	Annex	Anx
Annex	Annx	Anx
Annex	Anx	Anx
Arcade	Arc	Arc
Arcade	Arcade	Arc
Avenue	Av	Ave
Avenue	Ave	Ave
Avenue	Aven	Ave
Avenue	Avenu	Ave
Avenue	Avenue	Ave
Avenue	Avn	Ave
Avenue	Avnue	Ave
Bayoo	Bayoo	Byu
Bayoo	Bayou	Byu
Beach	Bch	Bch
Beach	Beach	Bch
Bend	Bend	Bnd
Bend	Bnd	Bnd
Bluff	Blf	Blf
Bluff	Bluf	Blf
Bluff	Bluff	Blf
Bluffs	Bluffs	Blfs
Bottom	Bot	Btm
Bottom	Bottm	Btm
Bottom	Bottom	Btm
Bottom	Btm	Btm
Boulevard	Blvd	Blvd
Boulevard	Boul	Blvd
Boulevard	Boulevard	Blvd

Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation	Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation
Boulevard	Boulv	Blvd Primary	Circle	Circl	Cir
Branch	Brnch	Br	Circle	Circle	Cir
Bridge	Brdge	Brg	Circle	Crcl	Cir
Bridge	Brg	Brg	Circle	Crcle	Cir
Bridge	Bridge	Brg	Circles	Circles	Cirs
Brook	Brk	Brk	Cliff	Clf	Clf
Brook	Brook	Brk	Cliff	Cliff	Clf
Brooks	Brooks	Brks	Cliffs	Clfs	Clfs
Burg	Burg	Bg	Cliffs	Cliffs	Clfs
Burgs	Burgs	Bgs	Club	Clb	Clb
Bypass	Byp	Byp	Club	Club	Clb
Bypass	Bypa	Byp	Common	Common	Cmn
Bypass	Bypas	Byp	Corner	Cor	Cor
Bypass	Bypass	Byp	Corner	Corner	Cor
Bypass	Byps	Byp	Corners	Corners	Cors
Camp	Camp	Cp	Corners	Cors	Cors
Camp	Cmp	Cp	Course	Course	Crse
Camp	Cp	Cp	Course	Crse	Crse
Canyon	Canyn	Cyn	Court	Court	Ct
Canyon	Canyon	Cyn	Court	Crt	Ct
Canyon	Cnyn	Cyn	Court	Ct	Ct
Canyon	Cyn	Cyn	Courts	Courts	Cts
Cape	Cape	Cpe	Courts	Cts	Cts
Cape	Cpe	Cpe	Cove	Cove	Cv
Causeway	Causeway	Cswy	Cove	Cv	Cv
Causeway	Causway	Cswy	Coves	Coves	Cvs
Causeway	Cswy	Cswy	Creek	Ck	Crk
Center	Cen	Ctr	Creek	Cr	Crk
Center	Cent	Ctr	Creek	Creek	Crk
Center	Center	Ctr	Creek	Crk	Crk
Center	Centr	Ctr	Crescent	Crecent	Cres
Center	Centre	Ctr	Crescent	Cres	Cres
Center	Cnter	Ctr	Crescent	Crescent	Cres
Center	Cntr	Ctr	Crescent	Cresent	Cres
Center	Ctr	Ctr	Crescent	Crscnt	Cres
Centers	Centers	Ctrs	Crescent	Crsent	Cres
Circle	Cir	Cir	Crescent	Crsnt	Cres
Circle	Circ	Cir			

Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation	Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation
Crest	Crest	Crst	Falls	Falls	Fls
Crossing	Crossing	Xing	Falls	Fls	Fls
Crossing	Crssing	Xing	Ferry	Ferry	Fry
Crossing	Crssng	Xing	Ferry	Frry	Fry
Crossing	Xing	Xing	Field	Field	Fld
Crossroad	Crossroad	Xrd	Field	Fld	Fld
Curve	Curve	Curv	Fields	Fields	Flds
Dale	Dale	Dl	Fields	Flds	Flds
Dale	Dl	Dl	Flat	Flat	Flt
Dam	Dam	Dm	Flat	Flt	Flt
Dam	Dm	Dm	Flats	Flats	Flts
Divide	Div	Dv	Flats	Flts	Flts
Divide	Divide	Dv	Ford	Ford	Frd
Divide	Dv	Dv	Ford	Frd	Frd
Divide	Dvd	Dv	Fords	Fords	Frds
Drive	Dr	Dr	Forest	Forest	Frst
Drive	Driv	Dr	Forest	Forests	Frst
Drive	Drive	Dr	Forest	Frst	Frst
Drive	Drv	Dr	Forge	Forg	Frg
Drives	Drives	Drs	Forge	Forge	Frg
Estate	Est	Est	Forge	Frg	Frg
Estate	Estate	Est	Forges	Forges	Frgs
Estates	Estates	Ests	Fork	Fork	Frk
Estates	Ests	Ests	Fork	Frk	Frk
Expressway	Exp	Expy	Forks	Forks	Frks
Expressway	Expr	Expy	Forks	Frks	Frks
Expressway	Express	Expy	Fort	Fort	Ft
Expressway	Expressway	Expy	Fort	Frt	Ft
Expressway	Expw	Expy	Fort	Ft	Ft
Expressway	Expy	Expy	Freeway	Freeway	Fwy
Extension	Ext	Ext	Freeway	Freewy	Fwy
Extension	Extension	Ext	Freeway	Frway	Fwy
Extension	Extn	Ext	Freeway	Frwy	Fwy
Extension	Extnsn	Ext	Freeway	Fwy	Fwy
Extensions	Extensions	Exts	Garden	Garden	Gdn
Extensions	Exts	Exts	Garden	Gardn	Gdn
Fall	Fall	Fall	Garden	Gdn	Gdn

Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation	Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation
Garden	Grden	Gdn	Highway	Hiway	Hwy
Garden	Grdn	Gdn	Highway	Hiwy	Hwy
Gardens	Gardens	Gdns	Highway	Hway	Hwy
Gardens	Gdns	Gdns	Highway	Hwy	Hwy
Gardens	Grdns	Gdns	Hill	Hill	Hl
Gateway	Gateway	Gtwy	Hill	Hl	Hl
Ferry	Fry	Fry	Hills	Hills	Hls
Gateway	Gatewy	Gtwy	Hills	Hls	Hls
Gateway	Gatway	Gtwy	Hollow	Hollow	Holw
Gateway	Gtway	Gtwy	Hollow	Hollows	Holw
Gateway	Gtwy	Gtwy	Hollow	Holw	Holw
Glen	Glen	Gln	Hollow	Holws	Holw
Glen	Gln	Gln	Inlet	Inlet	Inlt
Glens	Glens	Glns	Inlet	Inlt	Inlt
Green	Green	Grn	Island	Is	Is
Green	Grn	Grn	Island	Island	Is
Greens	Greens	Grns	Island	Islnd	Is
Grove	Grov	Grv	Islands	Islands	Iss
Grove	Grove	Grv	Islands	Islnds	Iss
Grove	Grv	Grv	Islands	Iss	Iss
Groves	Groves	Grvs	Isle	Isle	Isle
Harbor	Harb	Hbr	Isle	Isles	Isle
Harbor	Harbor	Hbr	Junction	Jct	Jct
Harbor	Harbr	Hbr	Junction	Jction	Jct
Harbor	Hbr	Hbr	Junction	Jctn	Jct
Harbor	Hrbor	Hbr	Junction	Junction	Jct
Harbors	Harbors	Hbrs	Junction	Junctn	Jct
Haven	Haven	Hvn	Junction	Juncton	Jct
Haven	Havn	Hvn	Junctions	Jctns	Jcts
Haven	Hvn	Hvn	Junctions	Jcts	Jcts
Heights	Height	Hts	Junctions	Junctions	Jcts
Heights	Heights	Hts	Key	Key	Ky
Heights	Hgts	Hts	Key	Ky	Ky
Heights	Ht	Hts	Keys	Keys	Kys
Heights	Hts	Hts	Keys	Kys	Kys
Highway	Highway	Hwy	Knoll	Knl	Knl
Highway	Highwy	Hwy	Knoll	Knol	Knl

Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation	Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation
Knoll	Knls	Knls	Meadows	Mdws	Mdws
Knolls	Knolls	Knls	Meadows	Meadows	Mdws
Lake	Lake	Lk	Meadows	Medows	Mdws
Lake	Lk	Lk	Mews	Mews	Mews
Lakes	Lakes	Lks	Mill	Mill	Ml
Lakes	Lks	Lks	Mill	Ml	Ml
Land	Land	Land	Mills	Mills	Mls
Landing	Landing	Lndg	Mills	Mls	Mls
Landing	Lndg	Lndg	Mission	Mission	Msn
Landing	Lndng	Lndg	Mission	Missn	Msn
Hollow	Hllw	Holw	Mission	Msn	Msn
Lane	La	Ln	Mission	Mssn	Msn
Lane	Lane	Ln	Motorway	Motorway	Mtwy
Lane	Lanes	Ln	Mount	Mnt	Mt
Lane	Ln	Ln	Mount	Mount	Mt
Light	Lgt	Lgt	Mount	Mt	Mt
Light	Light	Lgt	Mountain	Mntain	Mtn
Lights	Lights	Lgts	Mountain	Mntn	Mtn
Loaf	Lf	Lf	Mountain	Mountain	Mtn
Loaf	Loaf	Lf	Mountain	Mountin	Mtn
Lock	Lck	Lck	Mountain	Mtin	Mtn
Lock	Lock	Lck	Mountain	Mtn	Mtn
Locks	Lcks	Lcks	Mountains	Mntns	Mtns
Locks	Locks	Lcks	Mountains	Mountains	Mtns
Lodge	Ldg	Ldg	Neck	Nck	Nck
Lodge	Ldge	Ldg	Neck	Neck	Nck
Lodge	Lodg	Ldg	Orchard	Orch	Orch
Lodge	Lodge	Ldg	Orchard	Orchard	Orch
Loop	Loop	Loop	Orchard	Orchrd	Orch
Loop	Loops	Loop	Oval	Oval	Oval
Mall	Mall	Mall	Oval	Ovl	Oval
Manor	Manor	Mnr	Overpass	Overpass	Opas
Manor	Mnr	Mnr	Park	Park	Park
Manors	Manors	Mnrs	Park	Pk	Park
Manors	Mnrs	Mnrs	Park	Prk	Park
Meadow	Mdw	Mdw	Parks	Parks	Park
Meadow	Meadow	Mdw	Parkway	Parkway	Pkwy

Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation	Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation
Parkway	Parkwy	Pkwy	Radial	Rad	Radl
Parkway	Pkway	Pkwy	Radial	Radial	Radl
Parkway	Pkwy	Pkwy	Radial	Radiel	Radl
Parkway	Pky	Pkwy	Radial	Radl	Radl
Parkways	Parkways	Pkwy	Ramp	Ramp	Ramp
Parkways	Pkwys	Pkwy	Ranch	Ranch	Rnch
Pass	Pass	Pass	Ranch	Ranches	Rnch
Passage	Passage	Psge	Ranch	Rnch	Rnch
Path	Path	Path	Ranch	Rnchs	Rnch
Path	Paths	Path	Rapid	Rapid	Rpd
Pike	Pike	Pike	Rapid	Rpd	Rpd
Pike	Pikes	Pike	Rapids	Rapids	Rpds
Pine	Pine	Pne	Rapids	Rpds	Rpds
Pines	Pines	Pnes	Rest	Rest	Rst
Pines	Pnes	Pnes	Rest	Rst	Rst
Place	Pl	Pl	Ridge	Rdg	Rdg
Place	Place	Pl	Ridge	Rdge	Rdg
Plain	Plain	Pln	Ridge	Ridge	Rdg
Plain	Pln	Pln	Ridges	Rdgs	Rdgs
Plains	Plaines	Plns	Ridges	Ridges	Rdgs
Plains	Plains	Plns	River	Riv	Riv
Plains	Plns	Plns	River	River	Riv
Plaza	Plaza	Plz	River	Rivr	Riv
Plaza	Plz	Plz	River	Rvr	Riv
Plaza	Plza	Plz	Road	Rd	Rd
Point	Point	Pt	Road	Road	Rd
Point	Pt	Pt	Roads	Rds	Rds
Points	Points	Pts	Roads	Roads	Rds
Points	Pts	Pts	Route	Route	Rte
Port	Port	Prt	Row	Row	Row
Port	Prt	Prt	Rue	Rue	Rue
Ports	Ports	Prts	Run	Run	Run
Ports	Prts	Prts	Shoal	Shl	Shl
Prairie	Pr	Pr	Shoal	Shoal	Shl
Prairie	Prairie	Pr	Shoals	Shls	Shls
Prairie	Prarie	Pr	Shoals	Shoals	Shls
Prairie	Prr	Pr	Shore	Shoar	Shr

Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation	Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation
Shore	Shore	Shr	Stream	Strm	Strm
Shore	Shr	Shr	Street	St	St
Shores	Shoars	Shrs	Street	Str	St
Shores	Shores	Shrs	Street	Street	St
Shores	Shrs	Shrs	Street	Strt	St
Skyway	Skyway	Skwy	Streets	Streets	Sts
Spring	Spg	Spg	Summit	Smt	Smt
Spring	Spng	Spg	Summit	Sumit	Smt
Spring	Spring	Spg	Summit	Sumitt	Smt
Spring	Sprng	Spg	Summit	Summit	Smt
Springs	Spgs	Spgs	Terrace	Ter	Ter
Springs	Spngs	Spgs	Terrace	Terr	Ter
Springs	Springs	Spgs	Terrace	Terrace	Ter
Springs	Sprngs	Spgs	Throughway	Throughway	Trwy
Spur	Spur	Spur	Trace	Trace	Trce
Spurs	Spurs	Spur	Trace	Traces	Trce
Square	Sq	Sq	Trace	Trce	Trce
Square	Sqr	Sq	Track	Track	Trak
Square	Sqre	Sq	Track	Tracks	Trak
Square	Squ	Sq	Track	Trak	Trak
Square	Square	Sq	Track	Trk	Trak
Squares	Sqrs	Sqs	Track	Trks	Trak
Squares	Squares	Sqs	Trafficway	Trafficway	Trfy
Station	Sta	Sta	Trafficway	Trfy	Trfy
Station	Station	Sta	Trail	Tr	Trl
Station	Statn	Sta	Trail	Trail	Trl
Station	Stn	Sta	Trail	Trails	Trl
Stravenue	Stra	Stra	Trail	Trl	Trl
Stravenue	Strav	Stra	Trail	Trls	Trl
Stravenue	Strave	Stra	Tunnel	Tunel	Tunl
Stravenue	Straven	Stra	Tunnel	Tunl	Tunl
Stravenue	Stravenue	Stra	Tunnel	Tunls	Tunl
Stravenue	Stravn	Stra	Tunnel	Tunnel	Tunl
Stravenue	Strvn	Stra	Tunnel	Tunnels	Tunl
Stravenue	Strvnue	Stra	Tunnel	Tunnl	Tunl
Stream	Stream	Strm	Turnpike	Tpk	Tpke
Stream	Streme	Strm	Turnpike	Tpke	Tpke

Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation	Primary Street Suffix Name	Commonly Used Street Suffix or Abbreviation	Postal Service Standard Suffix Abbreviation
Turnpike	Trnpk	Tpke	Walk	Walk	Walk
Turnpike	Trpk	Tpke	Walks	Walks	Walk
Turnpike	Turnpike	Tpke	Wall	Wall	Wall
Turnpike	Turnpk Tpke		Way	Way	Way
Underpass	Underpass	Upas	Way	Wy	Way
Union	Un	Un	Ways	Ways	Ways
Union	Union	Un	Well	Well	Wl
Unions	Unions	Uns	Wells	Wells	Wls
Valley	Valley	Vly	Wells	Wls	Wls
Valley	Vally	Vly			
Valley	Vlly	Vly			
Valley	Vly	Vly			
Valleys	Valleys	Vlys			
Valleys	Vlys	Vlys			
Viaduct	Vdct	Via			
Viaduct	Via	Via			
Viaduct	Viadct	Via			
Viaduct	Viaduct	Via			
View	View	Vw			
View	Vw	Vw			
Views	Views	Vws			
Views	Vws	Vws			
Village	Vill	Vlg			
Village	Villag	Vlg			
Village	Village	Vlg			
Village	Villg	Vlg			
Village	Villiage	Vlg			
Village	Vlg	Vlg			
Villages	Villages	Vlgs			
Villages	Vlgs	Vlgs			
Ville	Ville	Vl			
Ville	Vl	Vl			
Vista	Vis	Vis			
Vista	Vist	Vis			
Vista	Vista	Vis			
Vista	Vst	Vis			
Vista	Vsta	Vis			

APPENDIX F. <u>DATA FILES AVAILABLE FROM THE USPS</u>

The following data files are available from the USPS for validating address data elements and obtaining missing address elements:

1.   City State File -- a comprehensive list of five-digit ZIP Codes with corresponding city and county name. The file of approximately 100,000 records is available as computer tape, cartridge, and CD-ROM.

2.   Five-Digit ZIP Code File -- five-digit ZIP Codes and detailed street data for cities with more than one delivery ZIP Code. It is used in conjunction with the City State File to assign five-digit ZIP Codes and validate existing five-digit ZIP Code assignments.

3.   ZIP+4 File -- provides the capability to add four-digit geographic segments to five-digit address codes. The four-digit code identifies a geographic segment within the five-digit delivery area, representing a city block, an office building, an individual high-volume receiver of mail, or any other unit that would aid efficient mail sorting and delivery. The file contains approximately 30 million records and is available in its entirety, or by selected states. It is available by computer tape, cartridge, and CD-ROM. Validation of the five-digit ZIP Code is necessary before a correct ZIP+4 Code can be obtained.

4.   TIGER/ZIP+4 -- relates ZIP+4 Codes to US Census Bureau data (latitude, longitude, track, Standard Metropolitan Statistical Area (SMSA), etc.